

ABSTRACT OF THE DISCLOSURE

5 An improved method for the simultaneous
sequence-specific identification of mRNAs in a mRNA
population allows the visualization of nearly every mRNA
expressed by a tissue as a distinct band on a gel whose
intensity corresponds roughly to the concentration of the
mRNA. In general, the method comprises the formation of
10 cDNA using anchor primers to fix a 3'-endpoint, producing
cloned inserts from the cDNA in a vector containing a
bacteriophage-specific promoter for subsequent RNA
synthesis, generating linearized fragments of the cloned
inserts, preparing cRNA, transcribing cDNA from the cRNA
15 using a set of primers, and performing PCR using a 3'-
primer whose sequence is derived from the vector and a
set of 5'-primers that is derived from the primers used
for transcription of cDNA from cRNA. The method can
20 identify changes in expression of mRNA associated with
the administration of drugs or with physiological or
pathological conditions.